

## Index of Authors

### VOLUME 89 (EMG & Motor Control), 1993

(Abstracts from Society Proceedings are not included)

- Aalfs, C.M., Koelman, J.H.T.M., Posthumus Meyjes, F.E. and Ongerboer de Visser, B.W.  
Posterior tibial and sural nerve somatosensory evoked potentials: a study in spastic paraparesis and spinal cord lesions (89) 437
- Abbruzzese, G., Schenone, A., Scramuzza, G., Caponnetto, C., Gasparetto, B., Adezati, L., Abbruzzese, M. and Viviani, G.L.  
Impairment of central motor conduction in diabetic patients (89) 335
- Abbruzzese, M., see Abbruzzese, G. (89) 335
- Adezati, L., see Abbruzzese, G. (89) 335
- Alfonsi, E., Nappi, G., Pacchetti, C., Martignoni, E., Conti, R., Sandrini, G. and Moglia, A.  
Changes in motoneuron excitability of masseter muscle following exteroceptive stimuli in Parkinson's disease (89) 29
- Andreassen, S., see Toft, E. (89) 311
- Awiszus, F. and Feistner, H.  
Abnormal EPSPs evoked by magnetic brain stimulation in hand muscle motoneurons of patients with amyotrophic lateral sclerosis (89) 408
- Ayyar, D.R., see Calancie, B. (89) 177
- Banerjee, T., see Murrison, A.W. (89) 434
- Banerjee, T.K., Mostofi, M.S., Us, O., Weerasinghe, V. and Sedgwick, E.M.  
Magnetic stimulation in the determination of lumbosacral motor radiculopathy (89) 221
- Beckley, D.J., Bloem, B.R. and Remler, M.P.  
Impaired scaling of long latency postural reflexes in patients with Parkinson's disease (89) 22
- Belsh, J., see Chokroverty, S. (89) 54
- Bertolasi, L., see Priori, A. (89) 131
- Bevilacqua, M., see Caccia, M.R. (89) 88
- Bloem, B.R., see Beckley, D.J. (89) 22
- Boccasena, P., see Rossini, P.M. (89) 442
- Boccasena, P., see Rossini, P.M. (89) 447
- Bötzel, K., Plendl, H., Paulus, W. and Scherg, M.  
Bereitschaftspotential: is there a contribution of the supplementary motor area? (89) 187
- Bourriez, J.L., see Derambure, P. (89) 197
- Brasil-Neto, J.P., see Pascual-Leone, A. (89) 120
- Brody, S., see Rau, H. (89) 328
- Brooke, J.D., see Collins, D.F. (89) 35
- Brooke, J.D., see Stewart, B.A. (89) 41
- Broton, J.G., see Calancie, B. (89) 177
- Brunia, C.H.M., see Rau, H. (89) 328
- Bucher, S.F., see Trenkwalder, C. (89) 95
- Burgess, R.C., see Ikeda, A. (89) 269
- Burghoff, M., see Curio, G. (89) 154
- Burke, D., see Cordo, P. (89) 45
- Caccia, M.R., Salvaggio, A., Dezuanni, E., Osio, M., Bevilacqua, M., Norbiato, G. and Mangoni, A.  
An electrophysiological method to assess the distribution of the sensory propagation velocity of the digital nerve in normal and diabetic subjects (89) 88
- Calancie, B., Broton, J.G., Klose, K.J., Traad, M., Difini, J. and Ayyar, D.R.  
Evidence that alterations in presynaptic inhibition contribute to segmental hypo- and hyperexcitability after spinal cord injury in man (89) 177
- Caponnetto, C., see Abbruzzese, G. (89) 335
- Caramia, M.D., Desiato, M.T., Cicinelli, P., Iani, C. and Rossini, P.M.  
Latency jump of "relaxed" versus "contracted" motor evoked potentials as a marker of cortico-spinal maturation (89) 61
- Caruso, G., Nilsson, J., Crisci, C., Nolano, M., Massini, R. and Lullo, F.  
Sensory nerve findings by tactile stimulation of median and ulnar nerves in healthy subjects of different ages (89) 392
- Chiappa, K.H., see Kiers, L. (89) 415
- Chokroverty, M., see Chokroverty, S. (89) 54
- Chokroverty, S., Flynn, D., Picone, M.A., Chokroverty, M. and Belsh, J.  
Magnetic coil stimulation of the human lumbosacral vertebral column: site of stimulation and clinical application (89) 54
- Cicinelli, P., see Caramia, M.D. (89) 61
- Cody, F.W.J., Lövgreen, B. and Schady, W.  
Increased dependence upon visual information of movement performance during visuo-motor tracking in cerebellar disorders (89) 399
- Cody, F.W.J., see Meara, R.J. (89) 261
- Cohen, L.G., see Kujirai, T. (89) 227
- Cohen, L.G., see Pascual-Leone, A. (89) 120
- Cohen, L.G., see Wassermann, E.M. (89) 424
- Collins, D.F., Brooke, J.D. and McIlroy, W.E.  
The independence of premovement H reflex gain and kinesthetic requirements for task performance (89) 35
- Conti, R., see Alfonsi, E. (89) 29
- Cordo, P., Gandevia, S.C., Hales, J.P., Burke, D. and Laird, G.  
Force and displacement-controlled tendon vibration in humans (89) 45
- Counter, S.A.  
Neurobiological effects of extensive transcranial electromagnetic stimulation in an animal model (89) 341

- Crisci, C., see Caruso, G. (89) 392
- Cros, D., see Kiers, L. (89) 415
- Curio, G., Ern , S.N., Burghoff, M., Wolff, K.-D. and Pilz, A.  
Non-invasive neuromagnetic monitoring of nerve and muscle injury currents (89) 154
- Damen, E.P.J., see Rau, H. (89) 328
- Daube, J.R.  
Muscle innervation. Letter to the Editor (89) 452
- Day, B.L., see Priori, A. (89) 131
- Defebvre, L., see Derambure, P. (89) 197
- Derambure, P., Defebvre, L., Dujardin, K., Bourriez, J.L., Jacques-son, J.M., Destee, A. and Guieu, J.D.  
Effect of aging on the spatio-temporal pattern of event-related desynchronization during a voluntary movement (89) 197
- Desiato, M.T., see Caramia, M.D. (89) 61
- Destee, A., see Derambure, P. (89) 197
- Dezuanni, E., see Caccia, M.R. (89) 88
- Diaz, A.F., see Hamano, T. (89) 278
- Difini, J., see Calancie, B. (89) 177
- Di Muzio, A., see Uncini, A. (89) 161
- Di Muzio, A., see Uncini, A. (89) 211
- Dressler, D., see Priori, A. (89) 131
- Dujardin, K., see Derambure, P. (89) 197
- Elbert, T., see Rau, H. (89) 328
- Epstein, C.M.  
Magnetic mapping of human cervical nerve roots: variation in normal subjects (89) 145
- Epstein, C.M.  
Reply to the letter from Dr. Jasper Daube (89) 453
- Ern , S.N., see Curio, G. (89) 154
- Esteban, A. and Traba, A.  
Fasciculation-myokymic activity and prolonged nerve conduction block. A physiopathological relationship in radiation-induced brachial plexopathy (89) 382
- Fang, J., see Kiers, L. (89) 415
- Fawcett, P.R.W., see Kennett, R.P. (89) 170
- Feistner, H., see Awiszus, F. (89) 408
- Flynn, D., see Chokroverty, S. (89) 54
- Fuglsang-Frederiksen, A., see Jensen, R. (89) 1
- Fuhr, P. and Hallett, M.  
Reciprocal inhibition of the H-reflex in the forearm: methodological aspects (89) 319
- Fujimoto, T. and Nishizono, H.  
Muscle contractile properties by surface electrodes compared with those by needle electrodes (89) 247
- Fukuyama, H., see Hamano, T. (89) 207
- Gambi, D., see Uncini, A. (89) 161
- Gandevia, S.C., see Cordo, P. (89) 45
- Gasparetto, B., see Abbruzzese, G. (89) 335
- Grafman, J., see Pascual-Leone, A. (89) 120
- Guieu, J.D., see Derambure, P. (89) 197
- Hales, J.P., see Cordo, P. (89) 45
- Hallett, M., see Fuhr, P. (89) 319
- Hallett, M., see Nilsson, J. (89) 349
- Hallett, M., see Pascual-Leone, A. (89) 120
- Hallett, M., see Wassermann, E.M. (89) 424
- Hamano, T., Kaji, R., Diaz, A.F., Kohara, N., Takamatsu, N., Uchiyama, T., Shibasaki, H. and Kimura, J.  
Vibration-evoked sensory nerve action potentials derived from Pacinian corpuscles (89) 278
- Hamano, T., Kaji, R., Fukuyama, H., Sadato, N. and Kimura, J.  
Lack of prolonged cerebral blood flow change after transcranial magnetic stimulation (89) 207
- Hansen, H.J., see Toft, E. (89) 311
- Hirakawa, S., see Satomi, K. (89) 113
- Horai, T., see Satomi, K. (89) 113
- Houser, C.M., see Pascual-Leone, A. (89) 120
- Iani, C., see Caramia, M.D. (89) 61
- Ikeda, A., L ders, H.O., Burgess, R.C. and Shibasaki, H.  
Movement-related potentials associated with single and repetitive movements recorded from human supplementary motor area (89) 269
- Jacquesson, J.M., see Derambure, P. (89) 197
- Jakob, C., Mathis, J., Weyh, T. and Struppler, A.  
Artifact reduction in magnetic stimulation (89) 287
- Jensen, R., Fuglsang-Frederiksen, A. and Olesen, J.  
Quantitative surface EMG of pericranial muscles. Reproducibility and variability (89) 1
- Kaji, R., see Hamano, T. (89) 207
- Kaji, R., see Hamano, T. (89) 278
- Kaji, R., see Kohara, N. (89) 242
- Kennett, R.P. and Fawcett, P.R.W.  
Repetitive nerve stimulation of anconeus in the assessment of neuromuscular transmission disorders (89) 170
- Kiers, L., Cros, D., Chiappa, K.H. and Fang, J.  
Variability of motor potentials evoked by transcranial magnetic stimulation (89) 415
- Kimura, J., see Hamano, T. (89) 207
- Kimura, J., see Hamano, T. (89) 278
- Kimura, J., see Kohara, N. (89) 242
- Kingma, R., see Ruijten, M.W.M.M. (89) 375
- Kl hn, S., see Michels, R. (89) 235
- Klose, K.J., see Calancie, B. (89) 177
- Koelman, J.H.T.M., see Aalfs, C.M. (89) 437
- Kohara, N., Kaji, R. and Kimura, J.  
Comparison of recording characteristics of monopolar and concentric needle electrodes (89) 242
- Kohara, N., see Hamano, T. (89) 278
- K mpf, D., see Michels, R. (89) 235
- Kramer, C.G.S., see Van Hilten, J.J. (89) 359
- Kuiper, S.I.R., see Van Hilten, J.J. (89) 359
- Kujirai, T., Sato, M., Rothwell, J.C. and Cohen, L.G.  
The effect of transcranial magnetic stimulation on median nerve somatosensory evoked potentials (89) 227
- Kunze, K., see Pfeiffer, G. (89) 365
- Laird, G., see Cordo, P. (89) 45
- Loh, L., see Mills, K.R. (89) 138
- L vgreen, B., see Cody, F.W.J. (89) 399
- L ders, H.O., see Ikeda, A. (89) 269
- Lullo, F., see Caruso, G. (89) 392
- Magi, S., see Uncini, A. (89) 161
- Mangoni, A., see Caccia, M.R. (89) 88
- Marchello, L.P., see Zappia, M. (89) 67
- Marsden, C.D., see Priori, A. (89) 131
- Martignoni, E., see Alfonsi, E. (89) 29
- Massa, R., see Rossini, P.M. (89) 447
- Massini, R., see Caruso, G. (89) 392
- Mathis, J., see Jakob, C. (89) 287
- McIlroy, W.E., see Collins, D.F. (89) 35
- McLeod, C., see Mills, K.R. (89) 138
- Meara, R.J. and Cody, F.W.J.  
Stretch reflexes of individual parkinsonian patients studied during changes in clinical rigidity following medication (89) 261
- Michels, R., Wessel, K., Kl hn, S. and K mpf, D.  
Long-latency reflexes, somatosensory evoked potentials and transcranial magnetic stimulation: relation of the three methods in multiple sclerosis (89) 235



- Middelkoop, H.A.M., see Van Hilten, J.J. (89) 359
- Mills, K.R., McLeod, C., Sheffy, J. and Loh, L.  
The optimal current direction for excitation of human cervical motor roots with a double coil magnetic stimulator (89) 138
- Moglia, A., see Alfonsi, E. (89) 29
- Montagna, P., see Zappia, M. (89) 67
- Mora, I., see Pérot, C. (89) 104
- Mostofi, M.S., see Banerjee, T.K. (89) 221
- Mostofi, S., see Murrison, A.W. (89) 434
- Murrison, A.W., Mostofi, S., Banerjee, T. and Sedgwick, E.M.  
Central motor conduction time in neurological decompression illness (89) 434
- Nakashima, K., Shimoyama, R., Yokoyama, Y. and Takahashi, K.  
Auditory effects on the electrically elicited blink reflex in patients with Parkinson's disease (89) 108
- Nappi, G., see Alfonsi, E. (89) 29
- Nilsson, J., Panizza, M. and Hallett, M.  
Principles of digital sampling of a physiologic signal (89) 349
- Nilsson, J., see Caruso, G. (89) 392
- Nishizono, H., see Fujimoto, T. (89) 247
- Nolano, M., see Caruso, G. (89) 392
- Norbiato, G., see Caccia, M.R. (89) 88
- Oertel, W.H., see Trenkwalder, C. (89) 95
- Olesen, J., see Jensen, R. (89) 1
- Ongerboer de Visser, B.W., see Aalfs, C.M. (89) 437
- Opsomer, R.J., see Rossini, P.M. (89) 442
- Osio, M., see Caccia, M.R. (89) 88
- Pacchetti, C., see Alfonsi, E. (89) 29
- Paniccia, M., see Zappia, M. (89) 67
- Panizza, M., see Nilsson, J. (89) 349
- Pascual-Leone, A., Houser, C.M., Reese, K., Shotland, L.I., Grafman, J., Sato, S., Valls-Solé, J., Brasil-Neto, J.P., Wassermann, E.M., Cohen, L.G. and Hallett, M.  
Safety of rapid-rate transcranial magnetic stimulation in normal volunteers (89) 120
- Pascual-Leone, A., see Wassermann, E.M. (89) 424
- Paulus, W., see Bötzel, K. (89) 187
- Paulus, W., see Trenkwalder, C. (89) 95
- Pérot, C. and Mora, I.  
H reflexes in close muscles: cross-talk or genuine responses? (89) 104
- Pfeiffer, G. and Kunze, K.  
Frequency analysis and duration of motor unit potentials: reliability and diagnostic usefulness (89) 365
- Picone, M.A., see Chokroverty, S. (89) 54
- Pilz, A., see Curio, G. (89) 154
- Plendl, H., see Bötzel, K. (89) 187
- Plendl, H., see Trenkwalder, C. (89) 95
- Posthumus Meyjes, F.E., see Aalfs, C.M. (89) 437
- Pradhan, S.  
Tibialis anterior R-1 response: physiological behaviour, normative data and clinical utility in L4-L5 radicular compression (89) 10
- Priori, A., Bertolasi, L., Dressler, D., Rothwell, J.C., Day, B.L., Thompson, P.D. and Marsden, C.D.  
Transcranial electric and magnetic stimulation of the leg area of the human motor cortex: single motor unit and surface EMG responses in the tibialis anterior muscle (89) 131
- Proeckl, D., see Trenkwalder, C. (89) 95
- Pullman, S., see Uncini, A. (89) 211
- Rau, H., Brody, S., Brunia, C.H.M., Damen, E.P.J. and Elbert, T.  
Activation of carotid baroreceptors inhibits spinal reflexes in man (89) 328
- Reese, K., see Pascual-Leone, A. (89) 120
- Remler, M.P., see Beckley, D.J. (89) 22
- Roos, R.A.C., see Van Hilten, J.J. (89) 359
- Rossini, P.M., Massa, R., Sancesario, G. and Boccasena, P.  
Sudomotor skin responses to brain stimulation do not depend on nerve sensory fiber functionality (89) 447
- Rossini, P.M., Opsomer, R.J. and Boccasena, P.  
Sudomotor skin responses following nerve and brain stimulation (89) 442
- Rossini, P.M., see Caramia, M.D. (89) 61
- Roth, G.  
Myo-axonal ephaptic responses and their F waves in case of chronic denervation (89) 252
- Rothwell, J.C., see Kujirai, T. (89) 227
- Rothwell, J.C., see Priori, A. (89) 131
- Ruijten, M.W.M.M., Sallé, H.J.A. and Kingma, R.  
Comparison of two techniques to measure the motor nerve conduction velocity distribution (89) 375
- Sabatelli, M., see Uncini, A. (89) 161
- Sadato, N., see Hamano, T. (89) 207
- Sallé, H.J.A., see Ruijten, M.W.M.M. (89) 375
- Salvaggio, A., see Caccia, M.R. (89) 88
- Sancesario, G., see Rossini, P.M. (89) 447
- Sandrini, G., see Alfonsi, E. (89) 29
- Sato, M., see Kujirai, T. (89) 227
- Sato, S., see Pascual-Leone, A. (89) 120
- Satomi, K., Horai, T. and Hirakawa, S.  
Electrophysiological study of superficial abdominal reflexes in normal men (89) 113
- Schady, W., see Cody, F.W.J. (89) 399
- Schenone, A., see Abbruzzese, G. (89) 335
- Scherg, M., see Bötzel, K. (89) 187
- Scramuzza, G., see Abbruzzese, G. (89) 335
- Sedgwick, E.M., see Banerjee, T.K. (89) 221
- Sedgwick, E.M., see Murrison, A.W. (89) 434
- Sheffy, J., see Mills, K.R. (89) 138
- Shibasaki, H., see Hamano, T. (89) 278
- Shibasaki, H., see Ikeda, A. (89) 269
- Shimoyama, R., see Nakashima, K. (89) 108
- Shotland, L.I., see Pascual-Leone, A. (89) 120
- Simone, P., see Uncini, A. (89) 211
- Sinkjær, T., see Toft, E. (89) 311
- Somnier, F.E. and Trojaborg, W.  
Neurophysiological evaluation in myasthenia gravis. A comprehensive study of a complete patient population (89) 73
- Sonoo, M. and Stålberg, E.  
The ability of MUP parameters to discriminate between normal and neurogenic MUPs in concentric EMG: analysis of the MUP "thickness" and the proposal of "size index" (89) 291
- Stålberg, E., see Sonoo, M. (89) 291
- Stewart, B.A. and Brooke, J.D.  
Interaction of reciprocally induced inhibition and premotor facilitation of soleus H reflexes in humans (89) 41
- Struppler, A., see Jakob, C. (89) 287
- Takahashi, K., see Nakashima, K. (89) 108
- Takamatsu, N., see Hamano, T. (89) 278
- Thompson, P.D., see Priori, A. (89) 131
- Toft, E., Sinkjær, T., Andreassen, S. and Hansen, H.J.  
Stretch responses to ankle rotation in multiple sclerosis patients with spasticity (89) 311
- Tonali, P., see Uncini, A. (89) 161
- Toro, C., see Wassermann, E.M. (89) 424
- Traad, M., see Calancie, B. (89) 177
- Traba, A., see Esteban, A. (89) 382
- Trenkwalder, C., Bucher, S.F., Oertel, W.H., Proeckl, D., Plendl, H. and Paulus, W.  
Bereitschaftspotential in idiopathic and symptomatic restless legs syndrome (89) 95

- Treviso, M., see Uncini, A. (89) 211
- Trojaborg, W., see Somnier, F.E. (89) 73
- Uchiyama, T., see Hamano, T. (89) 278
- Uncini, A., Di Muzio, A., Sabatelli, M., Magi, S., Tonali, P. and Gambi, D.  
Sensitivity and specificity of diagnostic criteria for conduction block in chronic inflammatory demyelinating polyneuropathy (89) 161
- Uncini, A., Treviso, M., Di Muzio, A., Simone, P. and Pullman, S.  
Physiological basis of voluntary activity inhibition induced by transcranial cortical stimulation (89) 211
- Us, O., see Banerjee, T.K. (89) 221
- Valentino, P., see Zappia, M. (89) 67
- Valls-Solé, J., see Pascual-Leone, A. (89) 120
- Valls-Solé, J., see Wassermann, E.M. (89) 424
- Van der Hoeven, J.H., Zwarts, M.J. and Van Weerden, T.W.  
Muscle fiber conduction velocity in amyotrophic lateral sclerosis and traumatic lesions of the plexus brachialis (89) 304
- Van Hilten, J.J., Middelkoop, H.A.M., Kuiper, S.I.R., Kramer, C.G.S. and Roos, R.A.C.  
Where to record motor activity: an evaluation of commonly used sites of placement for activity monitors (89) 359
- Van Weerden, T.W., see Van der Hoeven, J.H. (89) 304
- Viviani, G.L., see Abbruzzese, G. (89) 335
- Wassermann, E.M., Pascual-Leone, A., Valls-Solé, J., Toro, C., Cohen, L.G. and Hallett, M.  
Topography of the inhibitory and excitatory responses to transcranial magnetic stimulation in a hand muscle (89) 424
- Wassermann, E.M., see Pascual-Leone, A. (89) 120
- Weerasinghe, V., see Banerjee, T.K. (89) 221
- Wessel, K., see Michels, R. (89) 235
- Weyh, T., see Jakob, C. (89) 287
- Wolff, K.-D., see Curio, G. (89) 154
- Yokoyama, Y., see Nakashima, K. (89) 108
- Zappia, M., Valentino, P., Marchello, L.P., Paniccia, M. and Montagna, P.  
F-wave normative studies in different nerves of healthy subjects (89) 67
- Zwarts, M.J., see Van der Hoeven, J.H. (89) 304

# Index of Subjects

## VOLUME 89 (EMG & Motor Control), 1993

(Abstracts from Society Proceedings are not included)

- Abdominal reflexes, 113
- Achilles tendon reflex and baroreceptors, 328
- Activity monitor, 359
- Afferent
  - H reflex gain and kinesthetic demands, 35
- Age, ERD and voluntary movement, 197
- Ambulatory monitoring
  - where to record motor activity, 359
- Amyotrophic lateral sclerosis
  - and abnormal EPSP, 408
  - muscle fiber conduction in neurogenic lesions, 304
- Anconeus muscle
  - assessment of neuromuscular transmission disorders, 170
- Animal studies
  - extensive magnetic stimulation, 341
- Ankle rotation
  - stretch responses in spasticity, 311
- Antidromic conduction
  - myo-axonal ephaptic responses and F waves, 252
- Antistriated muscle antibodies and myasthenia gravis, 73
- Artifact reduction in magnetic stimulation, 287
- Audiogram
  - rapid-rate transcranial magnetic stimulation, 120
- Autonomic innervation
  - sudomotor skin response, 442, 447
- Axonal damage and conduction block, 161
  
- Baroreceptors and T reflex, 328
- Basal ganglia and blink reflex in Parkinson's disease, 108
- Bereitschaftspotentials
  - and supplementary motor area, 187
  - in restless legs syndrome, 95
  - with single and repetitive movements, 269
- Bifunctionality
  - identification of H reflex in close muscles, 104
- Blink reflex in Parkinson's disease, 108
- Book reviews, 204, 454
- Brachial plexus lesions and muscle fiber conduction, 304
  
- Central motor conduction
  - in decompression illness, 434
  - in diabetes, 335
- Cerebellar disorders and movement performance, 399
- Cerebral blood flow after transcranial magnetic stimulation, 207
- Cervical roots
  - double coil magnetic stimulation, 138
  - magnetic mapping, 145
- Children, *see* Infants
- Cholinergic mechanisms in myasthenia gravis, 73
- Chronic denervation
  - myo-axonal ephaptic responses and F waves, 252
- Chronic polyneuropathy and conduction block, 161
- Cognitive set
  - scaling of postural reflexes in Parkinson's disease, 22
- Coil orientation and stimulation of cervical roots, 138
  
- Collision
  - computer-assisted collision method, 88
  - measure of the motor nerve conduction velocity, 375
- Compound action potentials of lumbosacral roots, 54
- Concentric needle electrode
  - monopolar and concentric needle electrodes, 242
  - neurogenic and muscular motor unit potentials, 291
- Conduction
  - central motor conduction in decompression illness, 434
  - central motor conduction in diabetes, 335
  - computer-assisted collision method, 88
  - conduction block in chronic polyneuropathy, 161
  - determination of lumbosacral motor radiculopathy, 221
  - digital sampling frequency, 349
  - fasciculation-myokymic activity and conduction block, 382
  - magnetic stimulation of lumbosacral roots, 54
  - measure of the motor nerve conduction velocity, 375
  - muscle fiber conduction in neurogenic lesions, 304
- Cortical activation
  - ERD and voluntary movement, 197
  - magnetic stimulation effects on SEPs, 227
  - silent period, 211
- Corticospinal tract
  - maturation of relaxed vs. contracted motor EPs, 61
- Cross-talk
  - identification of H reflex in close muscles, 104
- Cyclic reflex discharge
  - responses of superficial abdominal reflexes, 113
  
- DC measurement
  - artifact reduction in magnetic stimulation, 287
  - neuromagnetic injury fields, 154
- Decompression illness and central motor conduction, 434
- Demyelination and conduction block, 161
- Detection of conduction block, 161
- Diabetes
  - central motor conduction, 335
  - computer-assisted collision method, 88
- Diagnostic value
  - repetitive nerve stimulation of anconeus, 170
- Digital nerve
  - computer-assisted collision method, 88
- Digital sampling frequency, 349
- Dipole source analysis of Bereitschaftspotentials, 187
- Discriminant analysis
  - neurogenic and muscular motor unit potentials, 291
- Diving and central motor conduction, 434
- Double stimulation
  - myo-axonal ephaptic responses and F waves, 252
- Dyskinesia while awake
  - readiness potential in restless legs syndrome, 95
- Dystonia
  - reciprocal inhibition of the H reflex, 319
  
- Ectopic activity
  - fasciculation-myokymic activity and conduction block, 382



## EEG

- digital sampling frequency, 349
- ERD and voluntary movement, 197
- rapid-rate transcranial magnetic stimulation, 120

## Electrical stimulation

- repetitive nerve stimulation of anconeus, 170
- responses of superficial abdominal reflexes, 113
- silent period from transcranial magnetic stimulation, 211
- transcranial stimulation of leg area, 131

## Electrode

- monopolar and concentric needle electrodes, 242
- properties of motor unit and surface electrodes, 247

## EMG

- diagnostic usefulness of MUP parameters, 365
- digital sampling frequency, 349
- identification of H reflex in close muscles, 104
- monopolar and concentric needle electrodes, 242
- neurogenic and muscular motor unit potentials, 291
- neurophysiology in myasthenia gravis, 73
- properties of motor unit and surface electrodes, 247
- quantitative surface EMG of pericranial muscles, 1
- scaling of postural reflexes in Parkinson's disease, 22
- stretch reflexes and rigidity in Parkinson's disease, 261
- stretch responses in spasticity, 311
- T reflex and baroreceptors, 328
- Ephaptic myo-axonal responses and F waves, 252
- EPSP in amyotrophic lateral sclerosis, 408
- Event-related desynchronization and voluntary movement, 197
- Evoked potentials
  - Bereitschaftspotentials and supplementary motor area, 187
  - digital sampling frequency, 349
  - somatosensory, *see* Somatosensory evoked potentials
- Exteroceptive influences on masseter muscle in PD, 29

## Fasciculation-myokymic activity and conduction block, 382

## Fibrillation potential

- monopolar and concentric needle electrodes, 242

## Filtering and digital sampling frequency, 349

## Frequency range and digital sampling frequency, 349

## F wave

- and myo-axonal ephaptic responses, 252
- determination of lumbosacral motor radiculopathy, 221
- normative studies, 67

## Habituation

- sound effects on blink reflex in Parkinson's disease, 108

## Hand muscles

- inhibitory and excitatory responses, 424

## Headache

- quantitative surface EMG of pericranial muscles, 1

## Heart rate

- T reflex and baroreceptors, 328

## Hereditary disorders

- conduction block in chronic polyneuropathy, 161

## Hoffmann reflex

- EMG and motor control, 41
- H reflex gain and kinesthetic demands, 35
- identification of H reflex in close muscles, 104
- presynaptic inhibition after spinal cord injury, 177
- reciprocal inhibition of the H reflex, 319
- tibialis anterior R1 response, 10

## Hormones

- rapid-rate transcranial magnetic stimulation, 120

## Infants

- maturation of relaxed vs. contracted motor EPs, 61

## Inhibitory responses in a hand muscle, 424

## Injury fields, 154

## Kinesthetic requirements

- controlled tendon vibration, 45
- H reflex gain and kinesthetic demands, 35

## Leg movement

- readiness potential in restless legs syndrome, 95

## Long-latency reflexes

- EPs and long-loop reflexes in multiple sclerosis, 235
- scaling of postural reflexes in Parkinson's disease, 22
- stretch reflexes and rigidity in Parkinson's disease, 261

## Long-latency responses

- myo-axonal ephaptic responses and F waves, 252
- silent period from transcranial magnetic stimulation, 211

## Low frequency depression

- presynaptic inhibition after spinal cord injury, 177

## Lumbar disk prolapse

- tibialis anterior R1 response, 10

## Lumbosacral vertebral column

- determination of motor radiculopathy, 221
- magnetic stimulation of lumbosacral roots, 54

## Magnetic injury fields, 154

## Magnetic resonance imaging in animal model, 341

## Magnetic stimulation

- abnormal EPSP in amyotrophic lateral sclerosis, 408
- and CBF, 207
- artifact reduction, 287
- central motor conduction in diabetes, 335
- determination of lumbosacral motor radiculopathy, 221
- double coil stimulation of cervical roots, 138
- effects on SEPs, 227
- EPs and long-loop reflexes in multiple sclerosis, 235
- extensive stimulation in animal model, 341
- inhibitory and excitatory responses in a hand muscle, 424
- mapping of cervical nerve roots, 145
- maturation of relaxed vs. contracted motor EPs, 61
- muscle innervation, 452, 453
- of leg area, 131
- of lumbosacral roots, 54
- rapid rate, 120
- silent period, 211
- sudomotor skin response, 442, 447
- variability of motor potentials, 415

## Masseteric reflex in PD, 29

## Maturation of relaxed vs. contracted motor EPs, 61

## Mechanoreceptor

- vibration-evoked sensory nerve AP, 278

## Median nerve

- magnetic stimulation effects on SEPs, 227
- sensory nerve findings by tactile stimulation, 392

## Meissner corpuscle and tactile stimulation, 392

## Microneurography

- controlled tendon vibration, 45

## Monopolar and concentric needle electrodes, 242

## Motoneuron

- abnormal EPSP in amyotrophic lateral sclerosis, 408
- F-wave normative studies, 67

## Motor activity, where to record it, 359

## Motor axon reflex

- myo-axonal ephaptic responses and F waves, 252

## Motor conduction

- in diabetes, 335
- measure of the motor nerve conduction velocity, 375

## Motor control in Parkinson's disease, 108

## Motor cortex

- Bereitschaftspotentials and supplementary motor area, 187
- central motor conduction in diabetes, 335

- inhibitory and excitatory responses in a hand muscle, 424
- transcranial stimulation of leg area, 131
- Motor evoked potentials
  - and long-loop reflexes in multiple sclerosis, 235
  - central motor conduction in diabetes, 335
  - inhibitory and excitatory responses in a hand muscle, 424
  - maturation of relaxed vs. contracted motor EPs, 61
- Motor nerve conduction time and lumbosacral motor radiculopathy, 221
- Motor neuron
  - silent period from transcranial magnetic stimulation, 211
- Motor roots
  - double coil magnetic stimulation of cervical roots, 138
- Motor sensory neuropathy and conduction block, 161
- Motor unit potential
  - diagnostic usefulness of MUP parameters, 365
  - monopolar and concentric needle electrodes, 242
  - neurogenic and muscular motor unit potentials, 291
  - properties of motor unit and surface electrodes, 247
- Movement
  - controlled tendon vibration, 45
  - movement performance in cerebellar disorders, 399
  - readiness potential in restless legs syndrome, 95
- Movement-related potential
  - with single and repetitive movements, 269
- Multiple sclerosis
  - EPs and long-loop reflexes, 235
  - stretch responses in spasticity, 311
- Muscle
  - identification of H reflex in close muscles, 104
  - muscle fiber conduction in neurogenic lesions, 304
  - muscle innervation, 452, 453
  - neuromagnetic injury fields, 154
  - neurophysiology in myasthenia gravis, 73
  - quantitative surface EMG of pericranial muscles, 1
  - tibialis anterior R1 response, 10
- Myasthenic syndromes
  - assessment of neuromuscular transmission disorders, 170
  - myasthenia gravis, 73
  - repetitive nerve stimulation of anconeus, 170
- Myelopathy
  - SEPs in spastic paraparesis and spinal cord lesion, 437
- Myo-axonal response and F waves, 252
- Myoclonus
  - readiness potential in restless legs syndrome, 95
- Myokymia and conduction block, 382
- Myopathy
  - diagnostic usefulness of MUP parameters, 365
- Needle electrode
  - monopolar and concentric needle electrodes, 242
  - properties of motor unit and surface electrodes, 247
- Needle scratch
  - responses of superficial abdominal reflexes, 113
- Nerve
  - assessment of neuromuscular transmission disorders, 170
  - digital sampling frequency, 349
  - double coil magnetic stimulation of cervical roots, 138
  - F wave normative studies, 67
  - magnetic mapping of cervical nerve roots, 145
  - measure of the motor nerve conduction velocity, 375
  - neuromagnetic injury fields, 154
  - neurophysiology in myasthenia gravis, 73
  - repetitive nerve stimulation of anconeus, 170
  - *see also* Conduction time
- Neural coding
  - vibration-evoked sensory nerve AP, 278
- Neuromagnetic injury fields, 154
- Neuromuscular transmission
  - assessment of neuromuscular transmission disorders, 170
  - repetitive nerve stimulation of anconeus, 170
- Neuropathy
  - central motor conduction in diabetes, 335
  - conduction block in chronic polyneuropathy, 161
  - fasciculation-myokymic activity and conduction block, 382
  - sudomotor skin response, 442, 447
- Non-invasive diagnosis
  - determination of lumbosacral motor radiculopathy, 221
  - neuromagnetic injury fields, 154
- Normal human subjects
  - Bereitschaftspotentials and supplementary motor area, 187
  - CBF after transcranial magnetic stimulation, 207
  - controlled tendon vibration, 45
  - double coil magnetic stimulation of cervical roots, 138
  - EMG and motor control, 41
  - ERD and voluntary movement, 197
  - F wave normative studies, 67
  - H reflex gain and kinesthetic demands, 35
  - identification of H reflex in close muscles, 104
  - inhibitory and excitatory responses in a hand muscle, 424
  - magnetic mapping of cervical nerve roots, 145
  - magnetic stimulation effects on SEPs, 227
  - quantitative surface EMG of pericranial muscles, 1
  - responses of superficial abdominal reflexes, 113
  - sensory nerve findings by tactile stimulation, 392
  - tibialis anterior R1 response, 10
  - T reflex and baroreceptors, 328
  - variability of motor potentials, 415
  - vibration-evoked sensory nerve AP, 278
- Nyquist theorem
  - digital sampling frequency, 349
- Orbicularis oculi reflex
  - sound effects in Parkinson's disease, 108
- Pacinian corpuscle
  - vibration-evoked sensory nerve AP, 278
- Pain
  - magnetic stimulation of lumbosacral roots, 54
- Parkinson's disease
  - exteroceptive influences on masseter muscle, 29
  - scaling of postural reflexes, 22
  - sound effects on blink reflex, 108
  - stretch reflexes and rigidity, 261
- Pericranial muscles, quantitative surface EMG, 1
- Peripheral nerves
  - magnetic mapping of cervical nerve roots, 145
  - measure of the motor nerve conduction velocity, 375
  - sensory nerve findings by tactile stimulation, 392
- Periodic movements in sleep
  - readiness potential in restless legs syndrome, 95
- Phase-related external suction
  - T reflex and baroreceptors, 328
- Pick-up field
  - monopolar and concentric needle electrodes, 242
- Positron emission tomography
  - CBF after transcranial magnetic stimulation, 207
- Postural reflexes in Parkinson's disease, 22
- Power spectral analysis
  - diagnostic usefulness of MUP parameters, 365
- Premovement facilitation
  - EMG and motor control, 41
  - H reflex gain and kinesthetic demands, 35



- Presynaptic inhibition
  - after spinal cord injury, 177
  - EMG and motor control, 41
- Proprioception in cerebellar disorders, 399
- Pyramidal tract
  - responses of superficial abdominal reflexes, 113
- Quantitative EMG
  - neurogenic and muscular motor unit potentials, 291
  - neurophysiology in myasthenia gravis, 73
  - quantitative surface EMG of pericranial muscles, 1
- Rabbit
  - extensive magnetic stimulation in animal model, 341
- Radiation plexopathy
  - fasciculation-myokymic activity and conduction block, 382
- Radiculopathy
  - determination of lumbosacral motor radiculopathy, 221
  - magnetic stimulation of lumbosacral roots, 54
  - tibialis anterior R1 response, 10
- Rapid-rate transcranial magnetic stimulation, 120
- Readiness potential in restless legs syndrome, 95
- Reciprocal inhibition of the H reflex, 319
- Recording of motor activity, 359
- Recovery function and transcranial magnetic stimulation, 211
- Reinnervation
  - muscle fiber conduction in neurogenic lesions, 304
- Repetitive movement and MRPs, 269
- Restless leg syndrome, 95
- Reticular formation
  - sound effects on blink reflex in Parkinson's disease, 108
- Rigidity
  - stretch reflexes in Parkinson's disease, 261
- Rise time
  - properties of motor unit and surface electrodes, 247
- R1 response of tibialis anterior, 10
- Safety
  - extensive magnetic stimulation in animal model, 341
  - rapid-rate transcranial magnetic stimulation, 120
- Seizure
  - rapid-rate transcranial magnetic stimulation, 120
- Sensory conduction
  - computer-assisted collision method, 88
- Sensory nerve action potentials
  - vibration-evoked sensory nerve AP, 278
- Signal processing
  - digital sampling frequency, 349
- Silent period from transcranial magnetic stimulation, 211
- Size index
  - neurogenic and muscular motor unit potentials, 291
- Sleep
  - where to record motor activity, 359
- Somatosensory evoked potentials
  - and long-loop reflexes in multiple sclerosis, 235
  - in spastic paraparesis and spinal cord lesion, 437
  - magnetic stimulation effects on SEPs, 227
- Somatosensory stimulation
  - controlled tendon vibration, 45
- Sound effects on blink reflex in Parkinson's disease, 108
- Spasticity
  - presynaptic inhibition after spinal cord injury, 177
  - SEPs in spastic paraparesis and spinal cord lesion, 437
  - stretch responses, 311
- Spike duration
  - diagnostic usefulness of MUP parameters, 365
- Spinal cord
  - presynaptic inhibition after spinal cord injury, 177
  - SEPs in spastic paraparesis and spinal cord lesion, 437
- Spinal motoneurons
  - silent period from transcranial magnetic stimulation, 211
- Spinal reflexes and baroreceptors, 328
- Spinal roots
  - central motor conduction in diabetes, 335
- Stimulus intensity
  - variability of motor potentials, 415
- Stretch reflex
  - and rigidity in Parkinson's disease, 261
  - in spasticity, 311
- Stroke
  - sudomotor skin response, 442, 447
- Subdural recording
  - MRPs with single and repetitive movements, 269
- Superficial abdominal reflexes, 113
- Supplementary motor area
  - and Bereitschaftspotentials, 187
  - MRPs with single and repetitive movements, 269
- Sural nerve
  - SEPs in spastic paraparesis and spinal cord lesion, 437
- Surface electrode
  - properties of motor unit, 247
- Sympathetic skin response, 442, 447
- Tactile stimulation and sensory nerve findings, 392
- Task performance
  - H reflex gain and kinesthetic demands, 35
- Tendon reflexes
  - controlled tendon vibration, 45
  - presynaptic inhibition after spinal cord injury, 177
- Threshold force
  - properties of motor unit and surface electrodes, 247
- Tibialis anterior muscle
  - R1 response, 10
  - transcranial stimulation of leg area, 131
- Tibial nerve
  - SEPs in spastic paraparesis and spinal cord lesion, 437
- Topographic mapping of ERD and voluntary movement, 197
- Tracking
  - H reflex gain and kinesthetic demands, 35
- Transcranial brain stimulation
  - and CBF, 207
  - effects on SEPs, 227
  - EPs and long-loop reflexes in multiple sclerosis, 235
  - of leg area, 131
  - rapid rate, 120
  - silent period, 211
- T reflex and baroreceptors, 328
- Twitch tension
  - properties of motor unit and surface electrodes, 247
- Ulnar nerve findings by tactile stimulation, 392
- Vibration
  - controlled tendon vibration, 45
  - presynaptic inhibition after spinal cord injury, 177
  - vibration-evoked sensory nerve AP, 278
- Visuomotor tracking in cerebellar disorders, 399
- Voluntary movement
  - and ERD, 197
  - silent period from transcranial magnetic stimulation, 211